

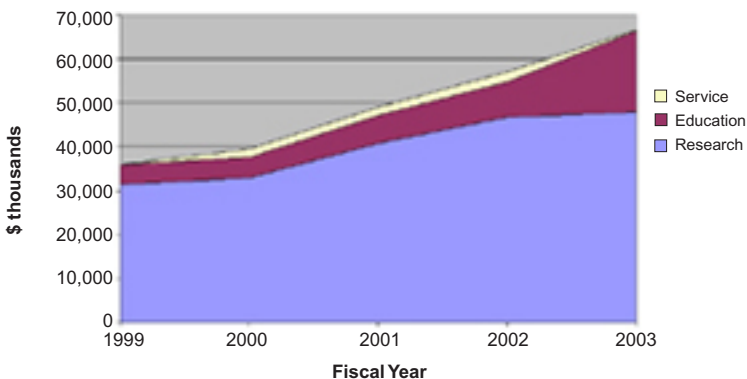
# SPONSORED PROGRAMS ANNUAL REPORT

Fiscal Year 2003 • Naval Postgraduate School

## PROGRAM OVERVIEW

The Naval Postgraduate School (NPS) has a strong Sponsored Program that has grown steadily to provide the faculty and staff support that is required to sustain a strong and viable graduate school. In fiscal year 2003, NPS had available \$97M in sponsored program funding. This amount includes multi-year projects from FY02 and those continuing into FY04. The total expenditures in FY03 exceeded \$66M. This represents a 15% growth over FY02 expenditures.

**Sponsored Program Profile FY 1999-2003**



Sponsored Programs (Research, Education and Services) are an integral part of the NPS mission. The Research Program exists to support the graduate education of our students. It does so by providing militarily relevant thesis topics that address issues from the current needs of the Fleet and Joint Forces to the science and technology that is required to sustain the long-term superiority of the Navy/DoD. Research varies from very fundamental to very applied, from unclassified to all levels of classification. Sponsored Research includes:

- Basic and Applied Research
- Individual and Interdisciplinary Group Projects
- Fleet Support
- Cooperative Research and Development Agreements with Industry, and
- Small Business Innovative Research

Integrated Graduate Education and Research Programs in Space Systems, Total Ship Systems Engineering, Combat Systems, Systems Engineering and Homeland Security and Defense along with off-campus courses and short courses are a few examples of the Sponsored Education Program.

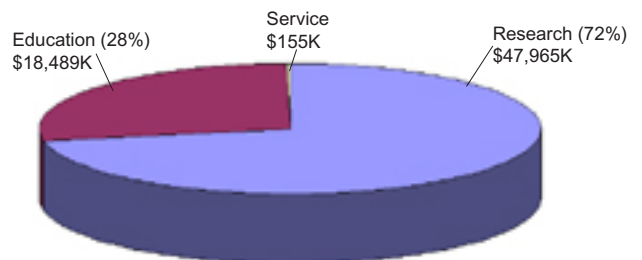
The Research and Sponsored Programs Office is pleased to present their Annual Report of NPS' research, teaching, and service activities for fiscal year 2003.

## SPONSORED PROGRAM EXPENDITURES

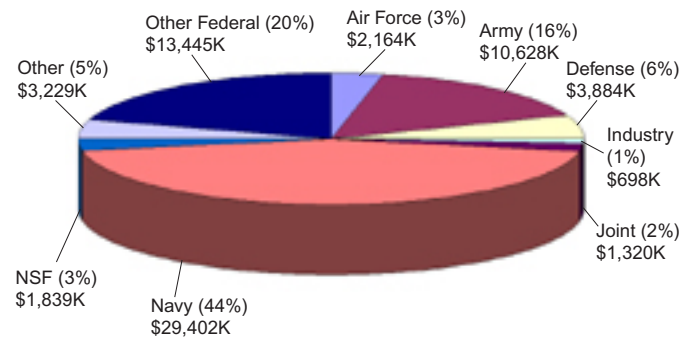
1 October 2002 - 30 September 2003

Total Expenditures: \$66.6 Million

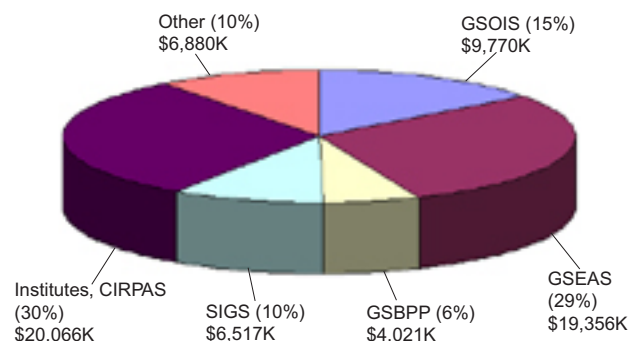
### By Activity Type



### By Sponsor



### By NPS Organization

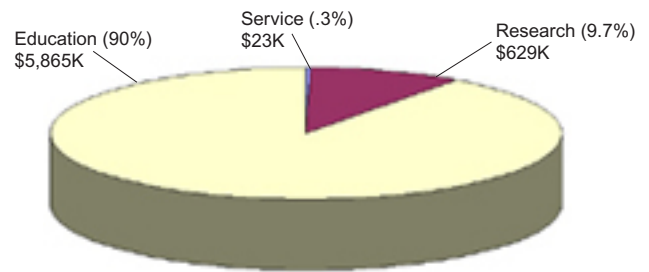


## SCHOOL OF INTERNATIONAL GRADUATE STUDIES

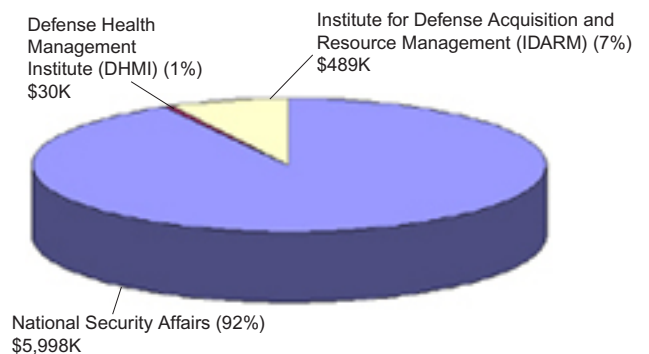
SIGS provides graduate-level education studies and research to U.S. and international students supporting joint and combined objectives. Established in 2001, SIGS mission is to educate the next generation of U.S. and international leaders and to equip them with new approaches, new insights, and new problem solving tools that could be immediately applied to their current and/or future jobs in defense/foreign policy areas. SIGS organizational elements include the Department of National Security Affairs, Center for Civil Military Relations, Defense Resource Management Institute, and International Defense Acquisition and Resource Management (IDARM) Institute. The Defense Health Management Institute (DHMI) was dis-established early in FY2003. This annual report includes sponsored programs in the Department of National Security Affairs (NSA) (which includes the Center for Homeland Security and Defense and the Center for Contemporary Conflict) DHMI, and IDARM.

Total Expenditures: \$6,517K

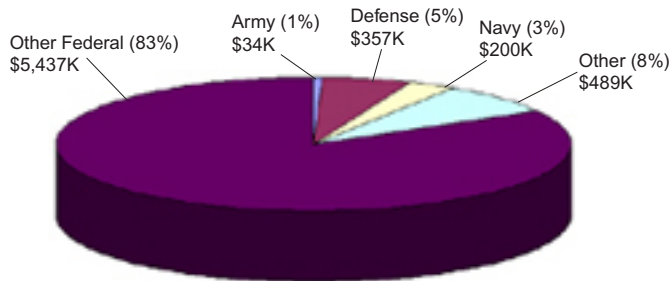
### By Type of Activity



### By Department



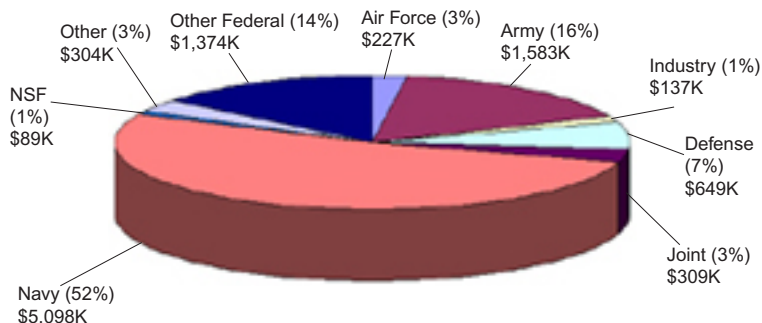
### By Sponsor



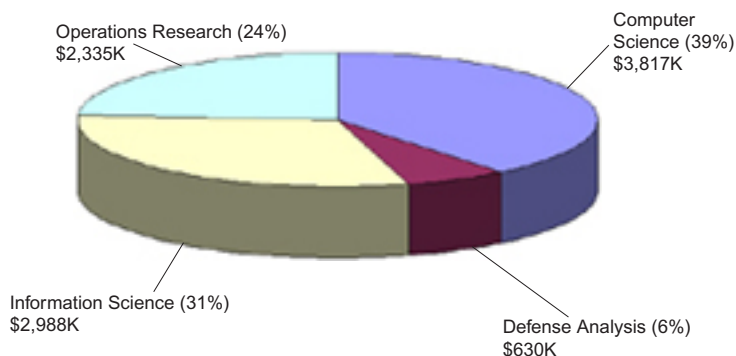
## GRADUATE SCHOOL OF OPERATIONAL AND INFORMATION SCIENCES

Total Expenditures: \$9,770K

### By Sponsor

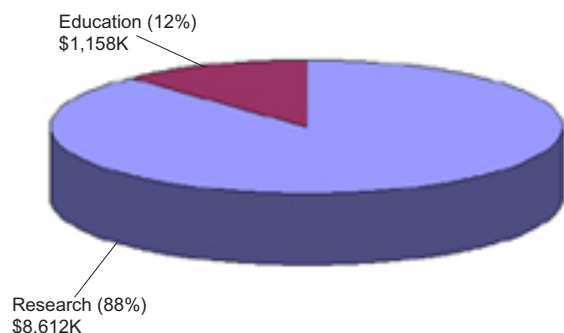


### By Department



GSOIS includes graduate resident programs consisting of 16 technical curricula and awards Master of Science Degrees and Ph.D. Degrees across four academic departments. In response to the needs of naval and military customers, graduate level education and cutting-edge research are focused in four non-traditional knowledge domains: Information Science and Technology, Military Computer Science, Military Operations Analysis and Research, Special Operations and Related Defense Analyses. The emphasis of sponsored activities is on mathematical, scientific, and technical skills to understand the state of the art and foster future improvements in military systems and operations, integration of subject matter contained in classical academic disciplines in militarily relevant ways, and subject matter suited to the corporate university's military customer.

### By Type of Activity

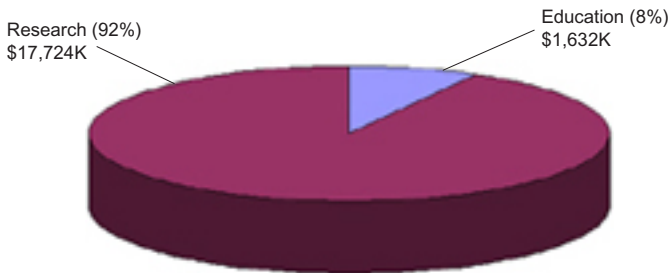


## GRADUATE SCHOOL OF ENGINEERING AND APPLIED SCIENCES

GSEAS provides graduate education leading to the Master of Science, Engineer, Doctor of Philosophy, and Doctor of Engineering degrees. The GSEAS is comprised of seven technical academic departments (Applied Mathematics, Electrical and Computer Engineering, Mechanical and Astronautical Engineering, Meteorology, Physics, Oceanography, Systems Engineering) and one interdisciplinary academic group (Space Systems). These academic entities offer rigorous degree programs tailored to the specific needs of the Navy. At the same time, they provide the technical foundation for interdisciplinary projects undertaken by faculty and students. Research Centers and unique laboratory facilities (Spacecraft Research and Design Lab, Rocket and Combustion Laboratory, Signal Enhancement Laboratory, Ocean Acoustic Observatory, Interactive Digital Environment Analysis (IDEA) Laboratory, Secure Space Systems Research Laboratory, Secure Computer Network Research Laboratory, Directed Energy Lab) provide rigor to the resident academic and sponsored programs.

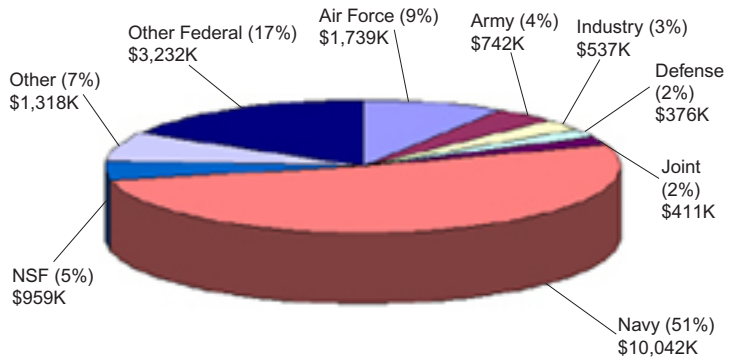
(Note: This FY2003 Annual Report includes the Department of Aeronautics and Astronautics. The Aeronautics Program was transferred to the Air Force Institute of Technology in 2003.)

### By Type of Activity

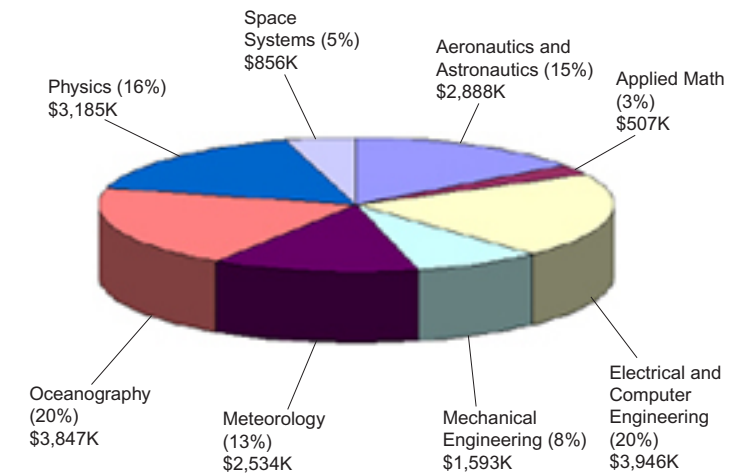


Total Expenditures: \$19,356K

### By Sponsor



### By Department

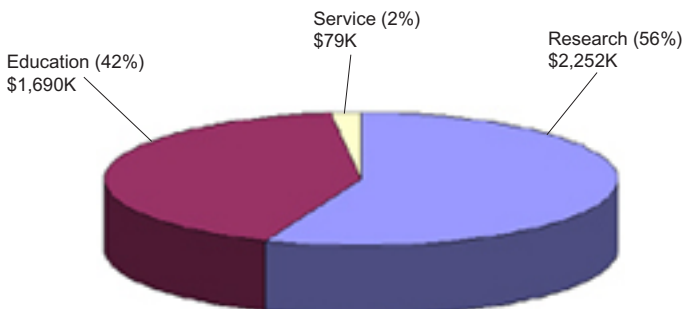


## GRADUATE SCHOOL OF BUSINESS AND PUBLIC POLICY

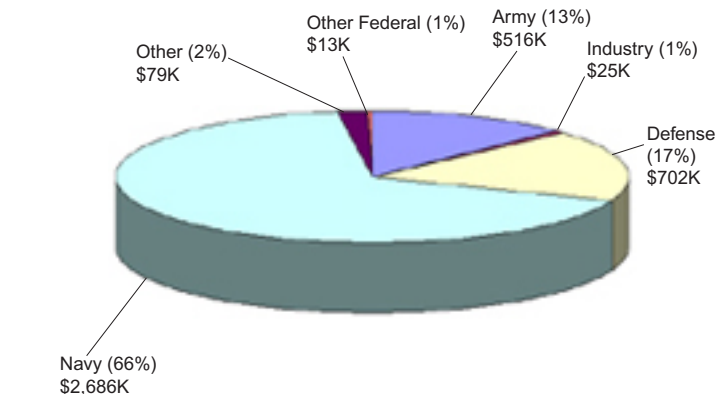
GSBPP offers a unique resident defense-focused MBA program plus Masters Degrees in five other DoD-relevant areas. Faculty research is an important component of the school and strives to support military decision making, problem solving, and policy setting, improve administrative processes and organizational effectiveness, contribute knowledge to academic disciplines, and advance the mission of graduate education. The research program is integrated to the greatest possible extent with the educational process. Students are encouraged to participate in faculty projects, and faculty research results are typically incorporated in classroom instruction. Topics and issues can be grouped into five broad functional areas: Acquisition and Contracting, Budgeting and Financial Management, Logistics and Transportation, Manpower Systems Analysis, and Policy Formulation, Analysis, and Management.

Total Expenditures: \$4,021K

### By Type of Activity



### By Sponsor

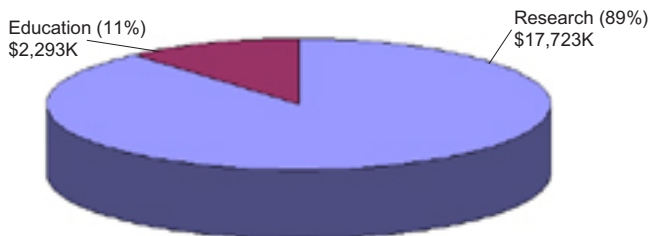


# RESEARCH AND EDUCATION INSTITUTES AND CENTER FOR INTERDISCIPLINARY REMOTELY-PILOTED AIRCRAFT STUDIES

The Research and Education Institutes were established to utilize the knowledge found in the Graduate Schools to provide a focus for interdisciplinary education and research in areas of current and emerging military challenges. The Institutes provide or facilitate degree programs, academic minors, executive education, short courses, workshops, conferences, student interaction with senior Naval leadership, and opportunities for student thesis and faculty research that range from basic to applied and which have significance to the Navy and DoD. In 2003, the Wayne Meyer Institute for System Engineering and Analysis, the Cebrowski Institute for Information Innovation and Superiority, and the Modeling, Virtual Environments and Simulation (MOVES) Institute were actively engaged in strong interdisciplinary efforts cutting across the NPS campus.

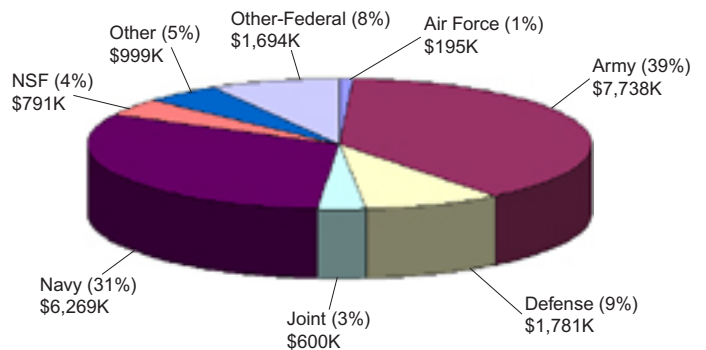
The Center for Remotely Piloted Aircraft Studies (CIRPAS) provides Remotely-Piloted Aircraft (RPA) as well as manned aircraft services to the science, research, test and evaluation communities. CIRPAS conducts payload integration, reviews flight safety and provides logistical planning and support to research and test projects.

## By Type of Activity

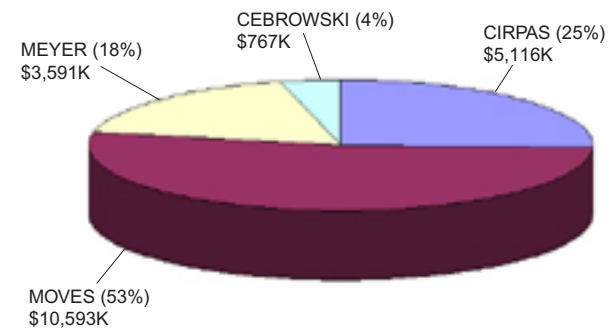


Total Expenditures: \$20,066K

## By Sponsor



## By Institute/Center



## ADDITIONAL RESEARCH FACTS IN FY2003

**14 Cooperative Research and Development Agreements (CRADA) were executed with private industry and universities. Partners included:**

- Lockheed Martin Maritime Systems and Sensors
- Northrop Grumman Ship Systems, Inc.
- Intel Corporation
- Advanced Ceramics Research, Inc.
- Orincon Defense
- Rivermind, Inc.
- ProSensing, Inc.
- Scientific Systems Company, Inc.
- National University of Singapore, Temasek Defense Science Institute
- United Defense LP Armament Systems Division
- Goodrich Corporation Fuel and Utility Systems
- Networld Exchange, Inc.
- DigitalNet Government Solutions, LLC
- Advanced Technology Institute

**717 Degrees were conferred:**

- Doctor of Philosophy - 2%
- Engineer - 1.25%
- Master of Science - 78%
- Master of Arts - 14.25%
- Master of Business Administration - 4.5%

**21 Space and Naval Warfare Systems Center Fellowships were awarded to NPS Students**

**18 National Research Council Research Associates were at NPS.**

**4 Engineer and Scientist Exchange Program (ESEP) Visiting Faculty were at NPS.**